

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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Applicant : William J. Baer et al.
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Docket No. : STL920000020US1 (0920.0041C)
Title : Method and System for Calculating Cost of a Compilation
of Content
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

APPEAL BRIEF

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Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

This brief is presented pursuant to the Notice of Appeal filed on June 29, 2010 and the Notice of Panel Decision from Pre-Appeal Brief Review dated August 24, 2010. The brief is filed pursuant to the requirements of 37 C.F.R. §41.37.

(1) Real Party in Interest

The real parties in interest include: International Business Machines Corporation, an assignee of record, which is a corporation duly organized and existing under the laws of the state of New York and having a place of business at New Orchard Road, Armonk, NY 10504; Pearson Education, Inc., an assignee of record, which is a corporation duly organized and existing under the laws of the state of Delaware and having a place of business at One Lake Street, Upper Saddle River, NJ 07458; and Richard W. Walkus, an individual, having a residence at 7 Wanda Avenue, Wayne, NJ 07470.

(2) Related Appeals and Interferences

Appellant is currently aware of the following prior appeal which may be related to, directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal. Ex Parte William J. Baer et al., U.S. Patent Application Serial No. 09/488,971, U.S. Patent No. 7,346,844, Appeal No. 2006-1674.

(3) Status of Claims

Claims 1 - 24 are currently rejected under 35 U.S.C. §103(a) and are on appeal.

Claims 25 - 27 have been canceled.

(4) Status of Amendments

No amendments have been filed subsequent to final rejection.

(5) Summary of Claimed Subject Matter

Independent claim 1 is directed toward a computer-implemented method for determining the cost of and producing a user-defined content object (e.g., See Page 2, lines 28 - 31; and Page 4, lines 12 - 15). The method comprises: defining the content object in accordance with user selection and arrangement of a plurality of content entities for the content object (e.g., See Page 3, lines 14 - 15 and 18 - 19; Page 4, lines 1 - 8; Page 54, lines 3 - 7; Page 58, lines 3 - 5; Page 60, lines 15 - 22; Page 70, lines 14 - 20; Page 78, lines 2 - 5 and 16 - 22; and Page 82, lines 15 - 17), wherein the content object is a digital object within the computer in the form of one of a book, a collection of images, an album, a video and a multimedia object (e.g., See Page 3, lines 3 - 9), and the content entities each include content comprising digital data, are stored within a data repository as a plurality of individually accessible file objects (e.g., See Page 3, lines 25 - 26), and are selectively associated with an actual content count representing the quantity of content within that content entity (e.g., See Page 4, lines 14 - 15; Page 91, lines 3 - 6; and Page 93, lines 7 - 13); and generating a price for the user to produce the user-defined content object, wherein the price is one of an actual price and an estimated price selected based on a parameter setting (e.g., See Page 4, lines 12 - 15; Page 91, lines 3 - 6; and Page 93, lines 7 - 14).

The price generation including: generating an estimated content count for the selected content entities that represents an estimated quantity of content within the content object (e.g., See Page 4, lines 12 - 13; and Page 92, lines 26 - 27), wherein the digital data within the selected content entities are utilized to determine the estimated content count representing the estimated quantity of

content within the content object (e.g., See Page 93, line 14 to Page 94, line 7), and generating from the estimated content count the estimated price to serve as the price for the user to produce the user-defined content object with the selected content entities in response to the parameter setting indicating the estimated price (e.g., See Page 93, line 14 to Page 94, line 7; and Page 94, lines 15 - 19), wherein the estimated price is determined based on a price per unit of content, and wherein the unit of content represents a predetermined quantity of content and the estimated content count indicates an estimated quantity of the units of content for the selected content entities (e.g., See Page 92, lines 26 - 27; Page 93, line 14 to Page 94, line 7; and Page 94, lines 15 - 19); and generating the actual price to serve as the price for the user to produce the user-defined content object from the actual content counts of the selected content entities in response to the parameter setting indicating the actual price (e.g., See Page 4, lines 14 - 15; Page 91, lines 3 - 6; Page 93, lines 7 - 13; and Page 94, lines 15 - 19).

Independent claim 9 is directed toward a program storage device readable by a machine, tangibly embodying a program of instructions executable by the machine to perform method steps for determining the cost of and producing a user-defined content object (e.g., See Page 2, lines 28 - 31; Page 4, lines 12 - 15; and Page 58, lines 3 - 8). The method comprising: defining the content object in accordance with user selection and arrangement of a plurality of content entities for the content object (e.g., See Page 3, lines 14 - 15 and 18 - 19; Page 4, lines 1 - 8; Page 54, lines 3 - 7; Page 58, lines 3 - 5; Page 60, lines 15 - 22; Page 70, lines 14 - 20; Page 78, lines 2 - 5 and 16 - 22; and Page 82, lines 15 - 17), wherein the content object is a digital object within the computer in the form of

one of a book, a collection of images, an album, a video and a multimedia object (e.g., See Page 3, lines 3 - 9), and the content entities each include content comprising digital data, are stored within a data repository as a plurality of individually accessible file objects (e.g., See Page 3, lines 25 - 26), and are selectively associated with an actual content count representing the quantity of content within that content entity (e.g., See Page 4, lines 14 - 15; Page 91, lines 3 - 6; and Page 93, lines 7 - 13); and generating a price for the user to produce the user-defined content object, wherein the price is one of an actual price and an estimated price selected based on a parameter setting (e.g., See Page 4, lines 12 - 15; Page 91, lines 3 - 6; and Page 93, lines 7 - 14).

The price generation including: generating an estimated content count for the selected content entities that represents an estimated quantity of content within the content object (e.g., See Page 4, lines 12 - 13; and Page 92, lines 26 - 27), wherein the digital data within the selected content entities are utilized to determine the estimated content count representing the estimated quantity of content within the content object (e.g., See Page 93, line 14 to Page 94, line 7), and generating from the estimated content count the estimated price to serve as the price for the user to produce the user-defined content object with the selected content entities in response to the parameter setting indicating the estimated price (e.g., See Page 93, line 14 to Page 94, line 7; and Page 94, lines 15 - 19), wherein the estimated price is determined based on a price per unit of content, and wherein the unit of content represents a predetermined quantity of content and the estimated content count indicates an estimated quantity of the units of content for the selected content entities (e.g., See Page 92, lines 26 - 27; Page 93, line 14 to Page 94, line 7; and Page 94, lines 15 - 19); and generating the

actual price to serve as the price for the user to produce the user-defined content object from the actual content counts of the selected content entities in response to the parameter setting indicating the actual price (e.g., See Page 4, lines 14 - 15; Page 91, lines 3 - 6; Page 93, lines 7 - 13; and Page 94, lines 15 - 19).

Independent claim 17 is directed towards a computer-implemented system for determining the cost of and producing a user-defined content object (e.g., See Figs. 1 and 6; Page 2, lines 28 - 31; and Page 4, lines 12 - 15). The system comprising a computer system (e.g., See Figs. 1 and 6; Page 6, lines 15 - 20; and Page 54, lines 16 - 20) including: means for defining the content object in accordance with user selection and arrangement of a plurality of content entities for the content object (e.g., See Figs. 1 and 6, Web Server 26 and one or more of User Web Interface 22, Application Layer 28, and API Layer 30; Page 3, lines 14 - 15 and 18 - 19; Page 4, lines 1 - 8; Page 54, lines 3 - 20; Page 58, lines 3 - 5; Page 60, lines 15 - 22; Page 70, lines 14 - 20; Page 78, lines 2 - 5 and 16 - 22; and Page 82, lines 15 - 17), wherein the content object is a digital object within the computer system in the form of one of a book, a collection of images, an album, a video and a multimedia object (e.g., See Page 3, lines 3 - 9), and the content entities each include content comprising digital data, are stored within a data repository as a plurality of individually accessible file objects (e.g., See Page 3, lines 25 - 26), and are selectively associated with an actual content count representing the quantity of content within that content entity (e.g., See Page 4, lines 14 - 15; Page 91, lines 3 - 6; and Page 93, lines 7 - 13); and means for generating a price for the user to produce the user-defined content object, wherein the price is one of an actual price and an estimated

price selected based on a parameter setting (e.g., See Figs. 1 and 6, Web Server 26 and one or more of Application Layer 28 and API Layer 30; Page 4, lines 12 - 15; Page 58, lines 3 - 5; Page 91, lines 3 - 6; and Page 93, lines 7 - 14).

The means for generating a price includes: means for generating an estimated content count for the selected content entities that represents an estimated quantity of content within the content object (e.g., See Figs. 1 and 6, Web Server 26 and one or more of Application Layer 28 and API Layer 30; Page 4, lines 12 - 13; Page 58, lines 3 - 5; and Page 92, lines 26 - 27), wherein the digital data within the selected content entities are utilized to determine the estimated content count representing the estimated quantity of content within the content object (e.g., See Page 93, line 14 to Page 94, line 7), and means for generating from the estimated content count the estimated price to serve as the price for the user to produce the user-defined content object with the selected content entities in response to the parameter setting indicating the estimated price (e.g., See Figs. 1 and 6, Web Server 26 and one or more of Application Layer 28 and API Layer 30; Page 58, lines 3 - 5; Page 93, line 14 to Page 94, line 7; and Page 94, lines 15 - 19), wherein the estimated price is determined based on a price per unit of content, and wherein the unit of content represents a predetermined quantity of content and the estimated content count indicates an estimated quantity of the units of content for the selected content entities (e.g., See Page 92, lines 26 - 27; Page 93, line 14 to Page 94, line 7; and Page 94, lines 15 - 19); and means for generating the actual price to serve as the price for the user to produce the user-defined content object from the actual content counts of the selected content entities in response to the parameter setting indicating the actual price (e.g., See Figs. 1 and

6, Web Server 26 and one or more of Application Layer 28 and API Layer 30; Page 4, lines 14 - 15; Page 58, lines 3 - 5; Page 91, lines 3 - 6; Page 93, lines 7 - 13; and Page 94, lines 15 - 19).

(6) Grounds of Rejection to be Reviewed on Appeal

(A) Whether claims 1 - 2, 7 - 10, 15 - 18, and 23 - 24 are unpatentable under 35 U.S.C. §103(a) over U.S. Patent No. 6,147,768 (Norris) in view of U.S. Patent No. 6,072,479 (Ogawa).

(B) Whether claims 3 - 6, 11 - 14, and 19 - 22 are unpatentable under 35 U.S.C. §103(a) over U.S. Patent No. 6,147,768 (Norris) in view of U.S. Patent No. 6,072,479 (Ogawa), in further view of U.S. Patent No. 5,768,521 (Dedrick).

(7) Argument

(A) Rejection under 35 U.S.C. §103(a) Over the Combination of the Norris and Ogawa Patents

In the Office Action of April 1, 2010, the Examiner has rejected claims 1 - 2, 7 - 10, 15 - 18, and 23 - 24 under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,147,768 (Norris) in view of U.S. Patent No. 6,072,479 (Ogawa).

(A.1) Legal Analysis for Obviousness

35 U.S.C. §103(a) states (in pertinent part):

“(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains...”

The Supreme Court in Graham v. John Deere, 338 U.S. 1, 148 U.S.P.Q. 459 (1966), stated that the obviousness or non-obviousness of subject matter is determined in view of the scope and content of the prior art, the differences between the prior art and the claims at issue and the level of ordinary skill in the pertinent art. Secondary considerations, such as commercial success, long felt but unsolved needs, failure of others, etc., might be utilized to give light to the circumstances surrounding the origin of the subject matter sought to be patented.

The Supreme Court in KSR Int'l Co. v. Teleflex, Inc., 82 U.S.P.Q.2d 1385, 1395 (2007) further indicated that the combination of familiar elements according to known methods is likely to be obvious when it does no more than produce predictable results. Accordingly, a court must

determine whether the improvement is more than the predictable use of prior art elements according to their established functions. Id. at 1396. Since the claimed subject matter may involve more than a simple substitution of one known element for another or the mere application of a known technique to the prior art, it will often be necessary for a court to look to interrelated teachings of multiple patents; the effects of demands known to the design community or present in the marketplace; and the background knowledge possessed by a person having ordinary skill in the art, all in order to determine whether there was an apparent reason to combine the known elements in the fashion claimed. This analysis should be made explicit. Id. The Court further noted that a patent composed of several elements is not proved obvious merely by showing that each of its elements was, independently, known in the prior art. In these types of cases, identification of the reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the manner of the claimed invention can be important. Id. When the prior art teaches away from combining certain known elements, discovery of a successful manner to combine them is more likely be nonobvious. Id. at 1395.

(A.2) Claims 1 - 2, 7 - 10, 15 - 18, and 23 - 24 are Patentable Over the Combination of the Norris and Ogawa Patents

Initially, the present invention features may be illustrated by the following example with respect to generation of a content object in the form of a book. The book structure may include volumes each with one or more chapters, where each chapter, in turn, may include one or more

sections. The content of the chapter sections resides in the data repository as individually accessible files each containing a section (or content entity). A user interface enables a user to manipulate, select and alter the book content. In other words, a user may construct and arrange the book (e.g., into volumes, chapters, sections, etc.) with content (e.g., text, images, etc.) selected from the data repository. In addition, the book's cost is calculated by estimating the amount of content it contains and determining a content cost based upon the content estimate. Optionally, actual costs may be utilized to produce the book's cost.

Independent claims 1, 9, and 17 reflect the above cost calculation for a content object, and each recite the features of: generating an estimated content count for the selected content entities that represents an estimated quantity of content within the content object, wherein the digital data within the selected content entities are utilized to determine the estimated content count representing the estimated quantity of content within the content object; and generating from the estimated content count the estimated price to serve as the price for the user to produce the user-defined content object with the selected content entities in response to the parameter setting indicating the estimated price, wherein the estimated price is determined based on a price per unit of content, and wherein the unit of content represents a predetermined quantity of content and the estimated content count indicates an estimated quantity of the units of content for the selected content entities.

Thus, for example, the estimated cost for a content object in the form of a book may be determined by estimating the amount of content within the content entities selected for the book, and

multiplying the estimated amount of content by a corresponding price per unit of content. By way of further example, the unit of content may be a page, where an estimated page count may be produced by determining the quantity of characters within a content entity and dividing that quantity by the average characters per page. The resulting estimated page counts may be multiplied by a corresponding price per page (e.g., See Example in Specification Page 95, line 25 to Page 96, line 22).

The Examiner concedes that the Norris patent does not disclose these features. In effect, the Examiner has reviewed the scope and content of the cited Norris patent, and determined that the differences between the Norris patent and the claims at issue consist of the above features as stated at Page 4 of the Office Action of April 1, 2010.

"Norris does not specifically teach generating an estimated content count for the selected content entities that represents an estimated quantity of content within the content object, wherein the digital data within the selected content entities are utilized to determine the estimated content count representing the estimated quantity of content within the content object, and generating from the estimated content count the estimated price to serve as the price for the user to produce the user-defined content object with the selected content entities in response to said parameter setting indicating the estimated price, wherein the estimated price is determined based on a price per unit of content, and wherein the unit of content represents a predetermined quantity of content and the estimated content count indicates an estimated quantity of said units of content for the selected content entities."

For at least this reason, the Norris patent does not disclose each and every feature within the independent claims, and Appellant reserves the right to subsequently raise arguments concerning the lack of disclosure by the Norris patent with respect to other features recited in the independent claims. The reservation of the right to raise subsequent arguments does not reflect the propriety of the Examiner's position, and is in no way to be construed as an admission or concession that the

Norris patent discloses any of the other features recited within the independent claims.

In order to compensate for the admitted deficiencies of the Norris patent, the Examiner further alleges that the Ogawa patent discloses the above claimed features lacking in the Norris patent as recited at Pages 4 - 5 of the Office Action of April 1, 2010.

"Ogawa teaches generating an estimated content count for the selected content entities that represents an estimated quantity of content within the content object, wherein the digital data within the selected content entities are utilized to determine the estimated content count representing the estimated quantity of content within the content object, and generating from the estimated content count the estimated price to serve as the price for the user to produce the user-defined content object with the selected content entities in response to said parameter setting indicating the estimated price, wherein the estimated price is determined based on a price per unit of content, and wherein the unit of content represents a predetermined quantity of content and the estimated content count indicates an estimated quantity of said units of content for the selected content entities."

The Examiner further alleges that it would have been obvious to combine the Norris and Ogawa patents to attain each and every feature recited in the independent claims (e.g., See Page 5 of the Office Action of April 1, 2010; "It would have been obvious to one of ordinary skill in the art [at] the time of the invention for the system of Norris to have included the estimated content count/cost feature of Ogawa. . .").

However, since the Ogawa patent does not disclose, teach, or suggest the above claimed features lacking in the Norris patent as discussed below, the combination of the Norris and Ogawa patents relied upon by the Examiner does not disclose, teach, suggest or render obvious each and every feature within the independent claims. Accordingly, this rejection is considered improper.

In particular, the Ogawa patent discloses a scenario editing system with a calculation module

calculating sizes of actual media data and adding up the media data sizes to estimate a total size of an overall application, based on a media-dependent attribute. A media attribute input module allows a user to enter the name of a person in charge and scheduled development time as an attribute, wherein the calculation module adds up actual media creation costs for calculation of an estimate of the cost of each media type and an overall application (e.g., See Abstract).

Although the Ogawa patent discloses a calculation module for calculating the size of each object (e.g., See Column 11, lines 45 - 49), the size calculation is utilized as an estimate for comparison with a communication or storage capacity to provide an indication of response time, whether the multimedia application is able to reside on a CD-ROM, and application quality (e.g., See Column 2, lines 42 - 48; Column 5, lines 40 - 46; and Column 12, lines 43 - 45). Thus, there is no disclosure, teaching or suggestion of the size of the objects being utilized to generate an estimated price based on a price per unit of content as recited in the independent claims.

Further, the Ogawa patent discloses the formulas utilized to calculate the size of the objects. The size is determined from various attributes with default values or values provided by a user (e.g., See Column 11, lines 13 - 24, and Table at lines 25 - 40). Specifically, with respect to voice data, the size is determined from the number of channels, the number of bits (presumably per channel), the sampling rate and the compression ratio (e.g., See Column 11, lines 56 - 62). The size of still picture data is determined from the screen display size, the number of bits (based on the quantity of colors used) and the compression ratio (e.g., See Column 12, lines 1 - 4). The size of moving picture data is determined from the screen display size, the number of bits (presumably based on the quantity of

colors used), the frame rate, and the compression ratio (e.g., See Column 12, lines 11 - 14). Thus, the object size is determined from default values or values entered by a user for object characteristics (e.g., that relate to presentation mechanisms, such as channels, display size, frame rate, compression ratio), rather than being estimated from the actual digital data within the objects as recited in the independent claims.

Moreover, the Ogawa patent discloses that the calculation module may further determine the development cost of the application (e.g., See Column 13, lines 46 - 48). However, the development cost is determined with development time as the base (e.g., See Column 13, lines 48 - 50). In particular, the formulas provided by the Ogawa patent calculate the cost as the product of development time (hours) and cost per hour (e.g., See Column 13, lines 59 - 62; and Column 14, lines 1 - 3 and 10 - 12). Accordingly, there is no disclosure, teaching or suggestion of the estimated price being determined based on a price per unit of content, wherein the unit of content represents a predetermined quantity of content and the estimated content count indicates an estimated quantity of units of content for the selected content entities as recited in the independent claims. In other words, the Ogawa patent determines the cost based on development time (or man hours) and the price per hour, whereas the independent claims recite the estimated cost to be based on the price for a unit of content and the estimated quantity of those units within the content object.

Thus, the features lacking in the Norris patent are not disclosed, taught or suggested by the Ogawa patent and, therefore, the combination of these patents relied upon by the Examiner fails to disclose, teach, suggest or render obvious each and every feature recited in the independent claims.

Since the proposed combination of the Norris and Ogawa patents does not disclose, teach, suggest or render obvious the features recited in independent claims 1, 9, and 17 as discussed above, the rejection is considered improper.

Claims 2, 7 - 8, 10, 15 - 16, 18, and 23 - 24 depend, either directly or indirectly, from independent claims 1, 9 or 17 and, therefore, include all the limitations of their parent claims. These claims are considered to overcome the combination of the Norris and Ogawa patents for substantially the same reasons discussed above in relation to their parent claims, and for further limitations recited in the dependent claims.

(B) Rejection under 35 U.S.C. §103(a) Over the Combination of the Norris, Ogawa, and Dedrick Patents

In the Office Action of April 1, 2010, the Examiner has rejected claims 3 - 6, 11 - 14, and 19 - 22 under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,147,768 (Norris) in view of U.S. Patent No. 6,072,479 (Ogawa), in further view of U.S. Patent No. 5,768,521 (Dedrick).

As discussed above, the obviousness or non-obviousness of subject matter is determined in view of the scope and content of the prior art, the differences between the prior art and the claims at issue and the level of ordinary skill in the pertinent art. It will often be necessary for a court to look to interrelated teachings of multiple patents; the effects of demands known to the design community or present in the marketplace; and the background knowledge possessed by a person having ordinary skill in the art, all in order to determine whether there was an apparent reason to combine known elements in the fashion claimed.

(B.1) Claims 3 - 6, 11 - 14, and 19 - 22 are Patentable Over the Combination of the Norris, Ogawa, and Dedrick Patents

Initially, claims 3 - 6, 11 - 14, and 19 - 22 depend, either directly or indirectly, from independent claims 1, 9 or 17 and, therefore include all the limitations of their parent claims. These claims are considered to overcome the combination of the Norris and Ogawa patents for substantially the same reasons discussed above in relation to their parent claims.

The Dedrick patent does not disclose, teach or suggest the claimed features lacking in the combination of the Norris and Ogawa patents discussed above. Rather, the Dedrick patent discloses a computer network system that contains a metering mechanism which can meter the flow of electronic information to a client computer within a network (e.g., See Abstract; Column 1, lines 62 - 65; and Column 2, lines 43 - 64). The information can be generated by a publisher and electronically distributed. The publisher/advertiser is provided with tools to create electronic information transmitted over the system (e.g., See Abstract; Column 1, lines 65 - 66; and Column 4, lines 26 - 51). The client computers each contain a graphical user interface to request consumption of the information (e.g., See Abstract; Column 2, lines 2 - 4; and Column 3, lines 13 - 30). The metering mechanisms control the transfer of information to the client computers (e.g., See Abstract; Column 2, lines 4 - 6; and Column 3, lines 46 - 59). Each unit of information has an associated cost type and cost value that are used to calculate a price for the information (e.g., See Abstract; Column 2, lines 7 - 10; and Column 3, lines 60 - 63).

Thus, the Dedrick patent discloses a publisher creating information for access by an end-user, and the price being calculated for the end-user to access or download that information based on a

cost type and cost value. There is no disclosure, teaching or suggestion of an estimated price being determined based on a price per unit of content, wherein the unit of content represents a predetermined quantity of content and the estimated content count indicates an estimated quantity of units of content for the selected content entities as recited in the claims.

Since the combination of the Norris, Ogawa, and Dedrick patents relied upon by the Examiner does not disclose, teach, suggest or render obvious each and every feature recited in claims 3 - 6, 11 - 14, and 19 - 22 as discussed above, the rejection is considered improper.

(8) Claims Appendix

1. A computer-implemented method for determining the cost of and producing a user-defined content object comprising:

defining said content object in accordance with user selection and arrangement of a plurality of content entities for said content object, wherein the content object is a digital object within the computer in the form of one of a book, a collection of images, an album, a video and a multimedia object, and the content entities each include content comprising digital data, are stored within a data repository as a plurality of individually accessible file objects, and are selectively associated with an actual content count representing the quantity of content within that content entity; and

generating a price for the user to produce the user-defined content object, wherein said price is one of an actual price and an estimated price selected based on a parameter setting and said price generation includes:

generating an estimated content count for the selected content entities that represents an estimated quantity of content within the content object, wherein the digital data within the selected content entities are utilized to determine the estimated content count representing the estimated quantity of content within the content object, and generating from the estimated content count the estimated price to serve as the price for the user to produce the user-defined content object with the selected content entities in response to said parameter setting indicating the estimated price, wherein the estimated price is determined based on a price per unit of content, and wherein the unit of content represents a predetermined quantity of content and the estimated content count indicates an estimated quantity of said units of content for the selected content entities; and

generating the actual price to serve as the price for the user to produce the user-defined content object from the actual content counts of the selected content entities in response to said parameter setting indicating the actual price.

2. The computer-implemented method of claim 1, wherein the step of generating an estimated content count further comprises the steps of determining an estimated content count for each selected content entity, and summing the entity content counts to obtain the estimated content count for the content object.

3. The computer-implemented method of claim 2, wherein the step of determining an estimated content count for entities containing characters further comprises the step of determining a character count for the entity.

4. The computer-implemented method of claim 3, wherein the step of determining an estimated content count further comprises the step of determining a page count from the character count.

5. The computer-implemented method of claim 3, wherein the step of determining a character count further comprises at least one of:

counting the number of content characters in the content entity; and

determining the content entity type, and determining an average character count for content entities of that type.

6. The computer-implemented method of claim 4, wherein the step of generating a content object price further comprises multiplying the page count with a predetermined price per page value.

7. The computer-implemented method of claim 1, wherein the content object further comprises user-provided content, and wherein generating a price for the content object further comprises the steps of separately determining a price for user-provided content and generating the selected estimated or actual price by summing the user-provided content price with the price determined for the remaining selected content entities of the content object.

8. The computer-implemented method of claim 7, wherein the price for user-provided content is determined in a first manner if the content count of the user-provided content exceeds a predefined content count maximum, and is determined in a second manner if the content count does not exceed the predefined maximum.

9. A program storage device readable by a machine, tangibly embodying a program of instructions executable by the machine to perform method steps for determining the cost of and producing a user-defined content object, the method comprising:

defining said content object in accordance with user selection and arrangement of a plurality of content entities for said content object, wherein the content object is a digital object in the form of one of a book, a collection of images, an album, a video and a multimedia object, and the content entities each include content comprising digital data, are stored within a data repository as a plurality of individually accessible file objects, and are selectively associated with an actual content count representing the quantity of content within that content entity; and

generating a price for the user to produce the user-defined content object, wherein said price is one of an actual price and an estimated price selected based on a parameter setting and said price generation includes:

generating an estimated content count for the selected content entities that represents an estimated quantity of content within the content object, wherein the digital data within the selected content entities are utilized to determine the estimated content count representing the estimated quantity of content within the content object, and generating from the estimated content count the estimated price to serve as the price for the user to produce the user-defined content object with the selected content entities in response to said parameter setting indicating the estimated price, wherein the estimated price is determined based on a price per unit of content, and wherein the unit of content represents a predetermined quantity of content and the estimated content count indicates an estimated quantity of said units of content for the selected content entities; and

generating the actual price to serve as the price for the user to produce the user-defined content object from the actual content counts of the selected content entities in response to said parameter setting indicating the actual price.

10. The program storage device of claim 9, wherein the step of generating an estimated content count further comprises the steps of determining an estimated content count for each selected content entity, and summing the entity content counts to obtain the estimated content count for the content object.

11. The program storage device of claim 10, wherein the step of determining an estimated content count for entities containing characters further comprises the step of determining a character count for the entity.

12. The program storage device of claim 11, wherein the step of determining an estimated content count further comprises the step of determining a page count from the character count.

13. The program storage device of claim 11, wherein the step of determining a character count further comprises at least one of:

counting the number of content characters in the content entity; and
determining the content entity type, and determining an average character count for content entities of that type.

14. The program storage device of claim 12, wherein the step of generating a content object price further comprises the step of multiplying the page count with a predetermined price per page value.

15. The program storage device of claim 9, wherein the content object further comprises user-provided content, and wherein the step of generating a price for the content object further comprises the steps of separately determining a price for user-provided content and generating the selected estimated or actual price by summing the user-provided content price with the price determined for the remaining selected content entities of the content object.

16. The program storage device of claim 15, wherein the price for user-provided content is determined in a first manner if the content count of the user-provided content exceeds a predefined content count maximum, and is determined in a second manner if the content count does not exceed the predefined maximum.

17. A computer-implemented system for determining the cost of and producing a user-defined content object comprising:

a computer system including:

means for defining said content object in accordance with user selection and arrangement of a plurality of content entities for said content object, wherein the content object is a digital object within the computer system in the form of one of a book, a collection of images, an

album, a video and a multimedia object, and the content entities each include content comprising digital data, are stored within a data repository as a plurality of individually accessible file objects, and are selectively associated with an actual content count representing the quantity of content within that content entity; and

means for generating a price for the user to produce the user-defined content object, wherein said price is one of an actual price and an estimated price selected based on a parameter setting and said means for generating a price includes:

means for generating an estimated content count for the selected content entities that represents an estimated quantity of content within the content object, wherein the digital data within the selected content entities are utilized to determine the estimated content count representing the estimated quantity of content within the content object, and means for generating from the estimated content count the estimated price to serve as the price for the user to produce the user-defined content object with the selected content entities in response to said parameter setting indicating the estimated price, wherein the estimated price is determined based on a price per unit of content, and wherein the unit of content represents a predetermined quantity of content and the estimated content count indicates an estimated quantity of said units of content for the selected content entities; and

means for generating the actual price to serve as the price for the user to produce the user-defined content object from the actual content counts of the selected content entities in response to said parameter setting indicating the actual price.

18. The computer-implemented system of claim 17, wherein the means for generating an estimated content count further comprises means for determining a content count for each selected content entity, and means for summing the entity content counts to obtain a content count for the content object.

19. The computer-implemented system of claim 18, wherein the means for determining an estimated content count for entities containing characters further comprises means for determining a character count for the entity.

20. The computer-implemented system of claim 19, wherein the means for determining an estimated content count further comprises means for determining a page count from the character count.

21. The computer-implemented system of claim 19, wherein the means for determining a character count further comprises at least one of a) means for counting the number of content characters in the content entity; and b) means for determining the content entity type, and means for determining an average character count for content entities of that type.

22. The computer-implemented system of claim 20, wherein the means for generating a content object price further comprises means for multiplying the page count with a predetermined price per page value.

23. The computer-implemented system of claim 17, wherein the content object further comprises user-provided content, and wherein the means for generating a price for the content object further comprises means for separately determining a price for user-provided content and means for generating the selected estimated or actual price by summing the user-provided content price with the price determined for the remaining selected content entities of the content object.

24. The computer-implemented system of claim 23, wherein the price for user-provided content is determined in a first manner if the content count of the user-provided content exceeds a predefined content count maximum, and is determined in a second manner if the content count does not exceed the predefined maximum.

(9) Evidence Appendix

None.

(10) Related Proceedings Appendix

Ex Parte William J. Baer et al., U.S. Patent Application Serial No. 09/488,971, U.S. Patent No. 7,346,844, Appeal No. 2006-1674.

The opinion in support of the decision being entered today was *not* written for publication and is *not* binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex Parte WILLIAM J. BAER, EDWARD HANAPOLE, ROBERT C. HARTMAN JR.,
RICHARD D. HENNESSY, EUGENE JOHNSON JR., I-MING KAO, JANET L.
MURRAY, JERRY D. ROBERTSON III and RICHARD W. WALKUS

Appeal No. 2006-1674
Application No. 09/488,971

ON BRIEF



Before THOMAS, KRASS and BLANKENSHIP, Administrative Patent Judges.

KRASS, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the final rejection of claims 1-43.

The invention pertains to reordering content in a content object stored as a plurality of hierarchically related content entities in a data repository.

Representative independent claim 1 is reproduced as follows:

1. A method for reordering content in a content object stored as a plurality of hierarchically related content entities in a data repository, each content entity having an identifier, comprising the steps of:

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defining the content object with a list of content entity identifiers such that moving a content entity identifier to a new location within the list redefines the order of the object's content entities,

wherein the hierarchically related content entities further comprise a parent container type and a child container type, wherein parent containers can contain child containers, and child containers can contain content entities.

The examiner relies on the following references:

Poole et al. (Poole)	6,006,242	Dec. 21, 1999
Bromberg et al. (Bromberg)	6,529,889	Mar. 4, 2003 (filed Jul. 27, 1999)

Lance Vaughn, "ezWriter 2.0 for Windows" (Atlanta, IN), <http://www.winsite.com>, application screenshots, 1-15, August 5, 1998.

Claims 1-43 stand rejected under 35 U.S.C. § 103. As evidence of obviousness, the examiner offers ezWriter and Bromberg with regard to claims 1-27 and 40-43, adding Poole to this combination with regard to claims 28-39.

Reference is made to the briefs and answer for the respective positions of appellants and the examiner.

OPINION

With regard to the independent claims, the examiner asserts that ezWriter discloses the claimed subject matter but for the claimed parent and child container adhering to inheritance, with said containers containing content entities.

The examiner turns to Bromberg for its Acappella Designer, encompassing a topic hierarchy, and a display for displaying questions, etc. related to each topic. Specifically, the examiner points to the abstract, column 5, lines 27-35, and column 16, lines 13-18, of

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Bromberg. The examiner asserts that a “rollup” process in Bromberg teaches that each container (parent container) in the hierarchy contains information on the activity of the containers that are subordinate to it (child containers), said containers containing content (i.e., questions, etc.). The examiner also points to column 18, lines 40-65, column 17, lines 27-40, and column 19, lines 10-20 and 22-34, of Bromberg for a teaching of a hierarchical table.

The examiner concludes that it would have been obvious “to apply Bromberg to EzWriter, providing EzWriter the benefit of hierarchical containers within its set of files making set wide edits, etc. possible” (answer-page 5).

Appellants contend that even if Bromberg discloses such parent and child container types, the topics, or “content entities” of Bromberg are different than the ezWriter .rtf files which are asserted, by the examiner, to be the claimed “content entities.” This difference, assert appellants, lies in the simple method of ezWriter of storing and organizing data, in contrast to Bromberg’s more complicated system of data storage. Appellants conclude that it would not have been obvious to discard the simple period organization system used in ezWriter and replace that simple system with the complex hierarchical rules tables of Bromberg. In appellants’ view, modifying ezWriter to incorporate the complex rules of Bromberg would modify the simple and streamlined environment desired by ezWriter and would undermine the simple operations desired in ezWriter.

Appellants assert that the proposed combination is improper because Bromberg is directed to organizing expert knowledge information while ezWriter is not concerned with the storage of expert information but rather is a utility program for “organizing outlines,

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chapters, notes, etc" (page 2 of ezWriter). Therefore, conclude appellants, "it would not be obvious to modify ezWriter to incorporate the questions and answers for organized expert information as taught by Bromberg" (reply brief-page 7).

We note, at the outset, that appellants do not dispute the examiner's findings that ezWriter describes the method for reordering content including the step of defining the content object with a list of content entity identifiers such that moving a content entity identifier to a new location within the list redefines the order of the object's content entities. The parties also agree that ezWriter does not describe the claimed step of "wherein the hierarchically related content entities further comprise a parent container type and a child container type, wherein parent containers can contain child containers, and child containers can contain content entities."

Moreover, while appellants do not necessarily agree that Bromberg discloses such parent and child container types, appellants do not deny this alleged teaching by Bromberg. In fact, appellants do not deny that all of the claimed steps/elements are shown by the applied references.

Appellants' issue with the examiner's rejection appears to be in the propriety of making the combination, appellants arguing that the artisan would not have modified ezWriter with the teachings of Bromberg in order to arrive at the instant claimed subject matter.

We have reviewed the evidence before us, including the disclosures of the applied references and the arguments of appellants and the examiner, and we conclude that the

examiner has established a *prima facie* case of obviousness with regard to claims 1-27 that has not been successfully rebutted by appellants.

Taking claim 1 as exemplary, the examiner has shown the steps of the claimed method as being shown in the prior art, *viz.*, that ezWriter taught the method for reordering content by defining the content object with a list of content entity identifiers such that moving a content entity identifier to a new location within the list redefines the order of the object's content entities, and that Bromberg taught hierarchically related content entities comprising a parent container type and a child container type, wherein parent containers can contain child containers, and child containers can contain content entities, and appellants do not contest such a showing.

The examiner further explained that the skilled artisan would have been led to apply Bromberg's containers to the hierarchical display of ezWriter to give the display added functionality (answer-page 14). Furthermore, it appears to us that if ezWriter taught artisans to reorder content in a content object stored as a plurality of hierarchically related content entities in a data repository, with each content entity having an identifier (this is not gainsaid by appellants), and Bromberg taught that hierarchically related content entities may comprise a parent container type and a child container type, wherein the parent containers can contain child containers and the child containers can contain content entities, there would have been a natural motivation and tendency for the artisan to employ Bromberg's hierarchically related content entities (parent/child containers) as the hierarchically related content entities in the

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data repository of ezWriter for whatever advantages Bromberg's hierarchically related content entities (parent/child containers) provide.

Appellants argue that the proposed combination is improper because ezWriter's .rft files, asserted by the examiner to be the claimed "content entities," are different from Bromberg's topics (or "content entities."). We find this unpersuasive of unobviousness as it matters not that the "content entities" of the references may represent different entities. What the artisan would have found more telling is that one reference discloses a plurality of hierarchically related content entities, with each content entity having an identifier and the other reference discloses that hierarchically related content entities may comprise a parent container type and a child container type, wherein the parent containers can contain child containers and the child containers can contain content entities. This clearly would have suggested that parent container types and child container types would be usable in the hierarchically related content entities in the data repository of ezWriter.

Appellants also argue that a modification of ezWriter by Bromberg would destroy the principle operation of ezWriter that is in keeping with a "streamlined environment" and that such modification would abandon ezWriter's use of the sequence of periods in front of entities in the .ezw file and instead use parent and child containers (principal brief-page 15). Again, we find this argument to be unpersuasive of unobviousness.

It is not necessary that one reference be bodily incorporated into the other reference. The teaching by Bromberg of using a parent container type and a child container type, wherein the parent containers can contain child containers and the child containers can

contain content would have suggested such a use by ezWriter. But the skilled artisan would have understood that ezWriter would not need to be so modified as to substitute Bromberg's specific system for that of ezWriter. The use of periods in ezWriter, itself, is a sort of parent/child container teaching in that an entity having three periods preceding it is a "child" of an entity having only two periods preceding it. Bromberg merely suggests that the hierarchically related content entities of ezWriter (.rtf files) may be modified to comprise a parent container type and a child container type, wherein the parent containers can contain child containers and the child containers can contain content entities. As the examiner has pointed out (e.g., answer-page 12), if there is some specific definition of the term "container," appellants have certainly not indicated as such.

Appellants argue (principal brief-page 16) that there is no reason why the child containers of Bromberg, which contain questions to be answered by an expert, would be combined with the .rtf files of ezWriter. Again, appellants are viewing the combination as a bodily incorporation of one reference into the other reference. But there is no reason why the skilled artisan making the modification would need to incorporate into ezWriter the expert answers of Bromberg. The more general teaching that would have been taken away by the skilled artisan viewing Bromberg is the use of a parent container type and a child container type, wherein the parent containers can contain child containers and the child containers can contain content entities.

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Appellants argue that modifying ezWriter to include the rollup feature of Bromberg would result in a substantial modification of the principle of operation of ezWriter and would introduce a level of complexity that is contradictory to its goal of streamlined environment. We disagree. Merely because a modification may make a system more complex, is not, *per se*, a reason to conclude unobviousness. Sometimes, the addition of some complexity would have been obvious, as in the instant case, but the advantage of the modification causing that complexity is a trade-off against a less complex system not offering the advantages of the modification. It does not mean that one way is not obvious over the other way, within the meaning of 35 U.S.C. § 103.

For the foregoing reasons, we will sustain the rejection of claims 1-27 under 35 U.S.C. § 103.

With regard to claims 40-43, the examiner rejected these claims under 35 U.S.C. § 103 for reasons set forth at pages 8-9 of the answer. Appellants argue, in particular, that the combination of references does not teach “a second list of content entity identifiers.” They assert that ezWriter teaches only a single list of content entity identifiers, as on page 8 of that reference, and that the order of the content entities within the list of content entity identifiers is modified by the addition or removal of periods. However, assert appellants, at no point is the movement of a content entity identifier performed by “specifying a location from a *second list of content entity identifiers* where the content entity identifier from the first list of content entity identifiers is to be moved.” Moreover, argue appellants, there is no teaching that a location of a second list of content entity identifiers comprises a current content entity

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identifier or a newly created content entity identifier.

The examiner explains that at page 9 of ezWriter, there is shown a tree having a first list (“Introduction,” and “..What is RTF (Rich Text Format)”), and second list (“.Planned Improvements,” and “..How to Request Improvements”). The content entity “..What is RTF (Rich Text Format)” is moved from the first list to the second list, as demonstrated on page 10 of ezWriter.

Appellants argue (reply brief-page 7) that the tree in ezWriter cited by the examiner is merely one list, with page 10 of that reference merely illustrating the structure of that single list when content is reorganized.

We agree with the examiner’s interpretation. We see no reason that each element in ezWriter’s tree having a single period preceding it cannot be considered a separate list, having other elements indented thereunder forming the separate list elements. While appellants argue that ezWriter shows merely a structure with a single list, appellants have offered nothing to evidence why the examiner’s interpretation is mistaken.

Accordingly, we find that ezWriter does describe two lists as claimed and we will sustain the rejection of claims 40-43 under 35 U.S.C. § 103.

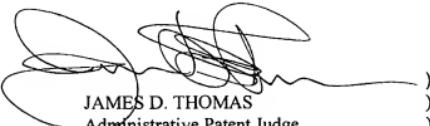
With regard to claims 28-39, also rejected under 35 U.S.C. § 103, but with Poole added to the combination of ezWriter and Bromberg, appellants argue only that Poole does not satisfy the deficiencies of the other two references. Since we find, *supra*, no said deficiencies, we will also sustain the rejection of claims 28-39 under 35 U.S.C. § 103.

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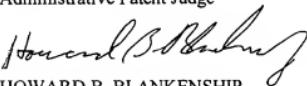
The examiner's decision rejecting claims 1-43 under 35 U.S.C. § 103 is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a)(1)(iv) (2004).

AFFIRMED


JAMES D. THOMAS
Administrative Patent Judge


ERROL A. KRASS
Administrative Patent Judge


HOWARD B. BLANKENSHIP
Administrative Patent Judge

) BOARD OF PATENT
) APPEALS AND
) INTERFERENCES

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SUGHRUE MION, PLLC
2100 PENNSYLVANIA AVENUE, N.W.
SUITE 800
WASHINGTON, DC 20037

(11) Conclusion

For at least the reasons discussed above, it is submitted that the rejections of claims 1 - 24 are improper and, accordingly, the Board is respectfully requested to reverse the rejections and order that this application be allowed.

Since the reasons discussed above are considered to be sufficient to overcome the rejections, Appellant reserves the right, if needed, to subsequently raise additional arguments pertaining to the impropriety of the rejections (e.g., claimed features not disclosed by the cited art, insufficient reasons to combine the cited art, etc.). This does not reflect the propriety of the Examiner's position with respect to these other issues (e.g., claimed features disclosed by the cited art, reasons to combine the cited art, etc.), and is in no way to be construed as a concession to the Examiner's position with respect to those other issues.

Dated: 10/22/10

Respectfully submitted by:

EDELL, SHAPIRO & FINNAN, LLC
CUSTOMER NO. 46157
1901 Research Boulevard, Suite 400
Rockville, MD 20850
(301) 424-3640

/Stuart B. Shapiro/
Stuart B. Shapiro
Reg. No. 40169